Title (en)

ANTENNAS FOR HANDHELD ELECTRONIC DEVICES WITH CONDUCTIVE BEZELS

Title (de)

ANTENNEN FÜR IN DER HAND GEHALTENE ELEKTRONISCHE GERÄTE MIT LEITFÄHIGEN FRONTBLENDEN

Title (fr)

ANTENNES POUR DISPOSITIFS ÉLECTRONIQUES PORTABLES À CADRES CONDUCTEURS

Publication

EP 2156512 A2 20100224 (EN)

Application

EP 08731482 A 20080305

Priority

- US 2008055970 W 20080305
- US 82119207 A 20070621

Abstract (en)

[origin: US2008316115A1] A handheld electronic device may be provided that contains wireless communications circuitry. The handheld electronic device may have a housing and a display. The display may be attached to the housing a conductive bezel. The handheld electronic device may have one or more antennas for supporting wireless communications. A ground plane in the handheld electronic device may serve as ground for one or more of the antennas. The ground plane and bezel may define a opening. A rectangular slot antenna or other suitable slot antenna may be formed from or within the opening. One or more antenna resonating elements may be formed above the slot. An electrical switch that bridges the slot may be used to modify the perimeter of the slot so as to tune the communications bands of the handheld electronic device.

IPC 8 full level

H01Q 9/04 (2006.01); **H01Q 1/24** (2006.01); **H01Q 1/52** (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/10** (2015.01); **H01Q 5/371** (2015.01); **H01Q 5/40** (2015.01); **H01Q 13/10** (2006.01); **H01Q 21/28** (2006.01); **H01Q 21/30** (2006.01); **H01Q 23/00** (2006.01)

CPC (source: EP GB KR US)

H01Q 1/24 (2013.01 - KR); **H01Q 1/243** (2013.01 - EP GB US); **H01Q 1/48** (2013.01 - US); **H01Q 1/52** (2013.01 - EP GB US); **H01Q 1/521** (2013.01 - EP US); **H01Q 5/20** (2015.01 - GB); **H01Q 5/371** (2013.01 - EP US); **H01Q 5/40** (2015.01 - EP US); **H01Q 9/04** (2013.01 - KR); **H01Q 9/0407** (2013.01 - US); **H01Q 9/0421** (2013.01 - EP GB US); **H01Q 13/08** (2013.01 - KR); **H01Q 13/10** (2013.01 - KR US); **H01Q 13/103** (2013.01 - EP GB US); **H01Q 21/28** (2013.01 - EP GB US); **H01Q 21/30** (2013.01 - EP GB US); **H01Q 23/00** (2013.01 - EP GB US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

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